

Title (en)
AIR BLOWER AND INDOOR UNIT OF AIR CONDITIONER

Title (de)
LUFTGEBLÄSE UND INNENRAUMEINHEIT EINER KLIMAAANLAGE

Title (fr)
SOUFFLERIE D'AIR ET UNITÉ INTÉRIEURE DE CLIMATISEUR

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Application
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JP 2018058639 A 20180326

Abstract (en)
According to one embodiment, an air blower (3) comprises an impeller (5). The impeller (5) comprises a main plate (21) comprising a boss portion (21b) attached to an axis of rotation (4a) of a motor (4) and through-holes (21c) surrounding the boss portion (21b), a shroud (22) disposed opposite the main plate (21), and blades (23) which are formed of synthetic resin integrally with the main plate (21) between the main plate (21) and the shroud (22) and whose insides communicate with the through-holes (21c), the blades (23) including recesses (23f) recessed from the main plate (21) side to the shroud (22) side. The blades (23) have shapes twisted in an axial direction of the axis of rotation (4a) from the main plate (21) side to the shroud (22) side. An area extending from a leading edge portion (23a) to a thickest portion (23c) having a greatest thickness of an area extending from the leading edge portion (23a) to a trailing edge portion (23b) is inclined from a pressure surface (23d) to a suction surface (23e) as the area extends from the main plate (21) side to the shroud (22) side. The thickness of the thickest portion (23c) is set to 15% to 25% of a chord length (L4) between the leading edge portion (23a) and the trailing edge portion (23b) in an interface with the main plate (21).

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Citation (search report)

- [I] JP 3131624 B2 20010205
- [A] US 2009129933 A1 20090521 - KILIAN JORG [DE], et al
- [A] US 2015176594 A1 20150625 - GEBERT DANIEL [DE], et al

Citation (examination)
EP 1933040 A1 20080618 - MITSUBISHI ELECTRIC CORP [JP]

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